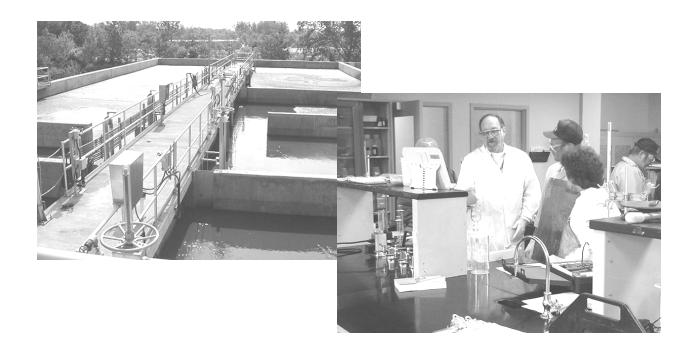


# Office of Operator Training



# Process Control and Laboratory Workshop Schedule Fall 2007

## **Department of Environmental Quality**

Course #	Title	Location	Dates	Times	Maximum Enrollment	Fee
DEQ 8	Ammonia/TKN Sampling and Testing	DEQ, Piedmont Regional Office	October 2 – 4, 2007	8:30 AM – 4:30 PM	16	\$150
DEQ 18	Introduction to BNR (Biological Nutrient Removal)	Spotsylvania, Massaponnax WWTP	October 16 – 17, 2007	8:30 AM – 4:30 PM	12	\$100
DEQ 19	Basic Lab Skills for Wastewater Operators	Verona, VA Middle River WWTP	November 6 – 7, 2007	8:30 AM – 4:30 PM	16	\$100
DEQ 5	Wastewater Solids Testing	DEQ, Piedmont Regional Office	November 14, 2007	8:30 AM – 4:30 PM	16	\$50
DEQ 19	Basic Lab Skills for Wastewater Operators	DEQ, West Central Regional Office	December 11–12, 2007	8:30 AM – 4:30 PM	16	\$100

Course descriptions are provided on the back of the page.

#### **Course Descriptions**

## DEQ 8 Ammonia and TKN Sampling and Testing Training Credits: 0.5 Registration Fee \$150

This two and a half day workshop provides the knowledge and skills required to perform total kjeldahl nitrogen and ammonia nitrogen determinations using the specific ion electrode methodology. The program includes hands on training in performing the direct and known addition electrode methods for Ammonia and TKN as well as TKN digestion and distillation and TKN determination by U.S. EPA method 351.4. Other methods for determination of both TKN and Ammonia will be discussed as well as sampling considerations, sam ple preservation, sample pretreatment, required calculations, recordkeeping and quality assurance considerations. If you perform or supervise the performance of total kjeldahl nitrogen or ammonia nitrogen testing you will find this program beneficial. The program is recognized by the State Board for Waterworks and Wastewater Works Operators.

## DEQ - 18 Introduction to BNR (Biological Nutrient Removal) Training Credits: 1.2 Registration Fee: \$100

This two day workshop provides an introduction to the principles involved in biological nutrient removal. The focus of the program will be the suspended growth (activated sludge) BNR processes. If you operate or manage a treatment system which includes biological nutrient removal or will be required to implement biological nutrient removal, this program will be helpful. The program will discuss the basic concepts associated with biological nutrient removal (nitrification, denitrification and biological phosphorus removal). It will identify performance factors, provide typical operating ranges for many of these factors and review various design and operational configurations currently being used for BNR. Based on availability, the program will include one or more site visits to facilities currently achieving full or partial BNR. The program is recognized by the State Board for Waterworks and Wastewater Works Operators.

## DEQ – 19 Basic Lab Skills for Wastewater Operators Training Credits: 1.0 Registration Fee: \$100

This two day workshop provides hands on instruction in the basic skills required to accurately perform wastewater related sampling and testing. If you are responsible for conducting your facility's sampling and testing, this program will be extremely beneficial. The program covers lab water sources, equipment selection, equipment and glassware cleaning and storage, and the collection and preservation of representative samples. The program also includes hands on experience in using glassware and lab instruments to dilute samples and chemicals and to prepare standards. It will also present the basic quality assurance considerations required at any facility performing permit related testing. The QA discussion will include the use of blanks, replicates, split samples and performance standards, procedures for the systematic verification of instrument accuracy, initial demonstration of competency (IDC) requirements and other quality assurance related topics. The program will include lectures, demonstrations and hands on laboratory activities. The program is recognized by the State Board for Waterworks and Wastewater Works Operators.

## DEQ - 5 Wastewater Sampling & Testing – Solids Testing Training Credits: 0.5 Registration Fee: \$50

This one day workshop provides the knowledge and skills required to perform total suspended solids sampling and testing. The program includes hands on training on the subject analysis as well as sampling considerations, sample preservation methods, calculations, recordkeeping, reporting results and quality assurance requirements. It will also include a discussion of sampling and testing procedures for other solids analyses such as volatile solids, settleable solids, and, as time permits, determination of % solids and % volatile matter in solid and semi-solid samples. If you perform or supervise the performance of wastewater solids testing you will find this program beneficial. The program is recognized by the State Board for Waterworks and Wastewater Works Operators.

## Process Control and Sampling & Testing Workshops General Information

#### **Course Locations:**

#### **DEQ - Piedmont Regional Office (RO)**

The Piedmont Regional Office of the Department of Environmental Quality is located at 4949A Cox Road, Glen Allen Virginia. Persons registering for the workshops will receive directions and other pertinent information (i.e. nearby lodging and restaurants)

#### Spotsylvania County, Massaponax Wastewater Treatment Plant

The Spotsylvania County Massaponax Wastewater Treatment Plant is located in Fredericksburg Virginia. Persons registering for the program will receive directions and other pertinent information.

#### Augusta County Service Authority, Middle River Wastewater Treatment Plant

The Augusta County Service Authority, Middle River Wastewater Treatment Plant is in Verona, Virginia. Persons registering for the program will receive directions and other pertinent information.

#### DEQ - West Central Regional Office (RO)

The West Central Regional Office of the Department of Environmental Quality is located at 3019 Peters Creek Rd in Roanoke Virginia. Persons registering for the workshops at this location will receive directions and other pertinent information (i.e. nearby lodging and restaurants)

#### Registration:

Only complete applications (registration form & payment) submitted to the Department's Office of Finance at the address shown on the form will be considered. Applicants are accepted on a "first comefirst served" basis. Due to popularity of the programs no "walk-in" registrations can be accepted. To register for these programs complete the registration form on the back, attach the appropriate payment and send to the address shown on the form. You will receive notification of your acceptance and an information package containing directions and other pertinent information.

#### Fees:

Fees are based on the length of the program and the complexity of the topic area covered. Fees for each program are listed on the schedule. Fee must be submitted in the form of check or money order made payable to the Department of Environmental Quality prior to the start of the program. No purchase orders or credit cards can be accepted. State Agencies should contact the Department's Finance Office (804 698-4162) for IAT procedures.

#### **Course Approval:**

These courses are approved or have been submitted for approval by the Virginia Board for Waterworks and Wastewater Works Operators. Approved programs can, when applicable, be used as substitution for required operational experience.

#### Withdrawal, Substitution & Refund Policy:

Registrants who must withdraw should notify the Department as soon as possible. Substitutions are permitted anytime **prior to the start of class**. Registrants who withdraw form the program at least 5 business days prior to the start of the program will receive a full refund. Withdrawals made after this time will not be eligible for a refund.

#### Cancellation:

The Department reserves the right to cancel any program when there are insufficient registrations. People who register will be notified of the cancellation and will receive a refund.

#### **Breaks and Lunches:**

The registration fee does not include break refreshments or lunch.

#### Additional Information:

Contact: Jack Vanderland Office of Operator Training Phone: 804 698 4092 email: jwvanderland@deq.virginia.gov

# Workshop Registration Form

(If more than one person from your facility is planning to attend, please use a separate form for each person registering)

Please check the v	workshop(s) you are re	gistering for:		
	monia/TKN Sampling & nont Regional Office, Gle	October 2 - 4, 2007	\$150	
	roduction to BNR ax WWTP, Fredericksbu	October 16 – 17, 2007	\$100	
	sic Lab Skills for Waster WWTP, Verona, VA	November 6 – 7, 2007	\$100	
	stewater Solids Testing nont Regional Office, Gle	November 14, 2007	\$50	
DEQ 19 Basic Lab Skills for Wastewater Operators DEQ West Central Regional Office, Roanoke, VA			December 11 - 12, 2007	\$100
Name: Mailing Address:	<u>Regist</u>	tration Informati	<u>on</u> 	
Daytime Phone:	()	Daytime Fax: ()	·	
Email Address:			_	
Employer Information	on:			
Employer:				
Supervisor:				
Telephone:	FAX: .			
Email:				
Ü	form & payment to:	Office of Finance Department of Envi PO Box 1104 Richmond, VA 232	•	
Total payment enclo	osed \$			